

Apr 12 2004 1:13PM

SOFIA MCGUIRE

RECEIVED  
CENTRAL FAX CENTER

7135212873

p. 1

APR 12 2004



TAWASSUL A. KHAN  
C.E.O.

OFFICIAL

NONLINEAR SEISMIC IMAGING, INC.

12639 Riffleman Trail • Cypress, Texas 77429  
281.469.2329 • Fax: 713.521.2873  
email: tkhan@houston.rr.com

Sent Via Facsimile

Number of Pages: 28

TO: Honorable Commissioner for Patents  
Company: USPTO  
Fax Number: 703/872-9306

CC: Victor Taylor, Examiner, Art Unit 2863  
Fax: 571/273-2281

From: Sofia McGuire

Fax Number: 713/521-2873  
Tel. Number: 713/552-2727

Date: 04/08/2004 8:20:08 PM

RE: Application 10/651,068

**REMARKS:**

Attached is the Information Disclosure Statement that includes non-Patent literature documents only. Several faxes of this nature will be sent consecutively due to the volume of literature to be sent.

If there are any questions, please call 713/942-7926. Thank you.

Sincerely, Sofia McGuire

Confidentiality Notice:

The following facsimile transmission may contain confidential and privileged information and is intended for the use of the specified recipient only. If you are NOT the addressee, you are hereby advised that any review, disclosure, copying, dissemination or other use of this transmission by persons other than the addressee is strictly prohibited. If you have received this transmission in error, please notify us IMMEDIATELY by telephone to arrange to return the original to us.

If you have any difficulties receiving this transmission, please call: 713/942-7926.

PTO/SB/21 (02-04)

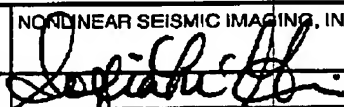
Approved for use through 07/31/2008. OMB 0651-0031

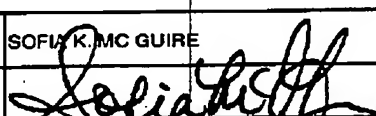
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

<b>TRANSMITTAL FORM</b> (to be used for all correspondence after initial filing)	Application Number	10/651,068	
	Filing Date	08/29/2003	
	First Named Inventor	TAWASSUL A. KHAN	
	Art Unit	2863	
	Examiner Name	VICTOR TAYLOR	
Total Number of Pages in This Submission	28	Attorney Docket Number	

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance communication to Technology Center (TC)
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Change of Correspondence Address	<input type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	
<input checked="" type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, Number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/Incomplete Application	<b>Remarks</b>	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	This portion of the Information Disclosure Statement includes the Biot article.	

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT	
Firm or Individual name	NONLINEAR SEISMIC IMAGING, INC
Signature	
Date	APRIL 12, 2004

CERTIFICATE OF TRANSMISSION/MAILING	
I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.	
Typed or printed name	SOFIA K. MCGUIRE
Signature	
Date	APRIL 12, 2004

This collection of information is required by 37 CFR 1.6. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/08B (08-03)

Approved for use through 07/31/2008. OMB 0651-0031  
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/651,068
Filing Date	08/29/2003
First Named Inventor	Tawassul A. Khan
Art Unit	2863
Examiner Name	Victor Taylor
Attorney Docket Number	

Sheet 1 of 2

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		JOHN P. CASTAGNA ET AL, Instantaneous spectral analysis: Detection of low-frequency shadows associated with hydrocarbons, February 2003, pp.120-128, The Leading Edge.	
		M.A. BIOT, Theory of Propagation of Elastic Waves in a Fluid-Saturated Porous Solid. Journal of the Acoustical Society of America, March 1956, pp. 168-191, Volume 28, No. 2.	
		A.E. SCHEIDEGGER, The Physics of Flow Through Porous Media, 1960, The MacMillan Company, New York.	
		THEODOROS KLIMENTOS AND CLIVE MCCANN, Why is the Biot slow compressional wave not observed in real rocks? Geophysics, December 1988, pp. 1605-1609, Volume 53, No. 12	
		DONSKOY, KHASHANAH AND MCKEE, Nonlinear acoustic waves in porous media in the context of Biot's theory, Jnl of the Acoustical Society of America, Nov 1997, pp. 2521-2528, 102	
		JOHNSON ET AL., Manifestation of nonlinear elasticity in rock: convincing evidence over large frequency and strain intervals from laboratory studies, Journal of Nonlinear Processes in Geophysics, pp. 1-12, MS 95023.	
		PAUL JOHNSON et al, Nonlinear Generation of Elastic Waves in Crystalline Rock, Journal of Geophysical Research, April 10, 1987, 3597-3602, Vol. 92, No. B5.	
		MEEGAN, JOHNSON et al, Observations of nonlinear elastic wave behavior in sandstone, Jnl. of Acoustical Society of America, December 1993, pp. 3387-3391, Volume 94, No. 6	
		JOHNSON AND MCCALL, Observation and implications of nonlinear elastic wave response in rock, Geophysical Research Letters, Feb. 1, 1994, pp. 165-169, Vol. 21, No. 3.	

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 809. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTO/SB/08B (09-03)

Approved for use through 07/31/2008. OMB 0851-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Application Number	10/651,068
Filing Date	08/29/2003
First Named Inventor	Tawassul A. Khan
Art Unit	2863
Examiner Name	Victor Taylor
Attorney Docket Number	

Sheet 2 of 2

**NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		GELADI M. GOLOSHUBIN et al., Seismic low-frequency effects from oil-saturated reservoir zones, SEG 2002, The Leading Edge	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.